

***Staurochilus ramosus* (Lindl.) Seidenf. (Orchidaceae), a Rare Orchid for Tripura State, India**

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ABSTRACT: Orchid s is very important group of plant having export value. Tripurastate is very rich and diverse in orchid flora due to its congenial climate. During exploration in Tripura state, *Staurochilus ramosus* (Lindl.) Seidenf. was collected and identified with modern flora. The present paper deals with correct nomenclature, phytography, distribution, ecology etc of this rare orchid.

Keywords: *Staurochilus ramosa*, Rareorchid, Tripura.

INTRODUCTION

A plant collection tour (17th to 23rd February, 2016) under Annual Action Plan Project of Acharya Jagadish Chandra Bose Indian Botanic Garden, Botanical Survey of India, Howrah was conducted to Tripura state for collection of Endemic, Endangered and Threatened species and introduction in AJC Bose Indian Botanic Garden considering the rich biodiversity as well as the un-exploredness.

The state of Tripura harbours a rich flora with orchids (23 genera encompassing 33 species). During the current exploration of different areas of Tripura, a *Staurochilus* species was collected in flowering which is maintained in the Nursery No.1 of the AJC Bose Indian Botanic Garden, BSI, Howrah. After perusal of modern literature, the taxa is turned out to be *Staurochilus ramosus* (Lindl.) Seidenf., which is a rare orchid to the Flora of Tripura State (Fig. 1 & 2). The earlier worker Deb (1983) who was the pioneer worker of the Flora of Tripura State did not report this species from Tripura. Similarly, Baishanab *et al.* (2017); Baishanab and Datta (2019) did not report this species. Hooker (1890) the pioneer worker for India did not report this species from Tripura state. The correct nomenclature, diagnostic characters, phenology, ecology, distribution etc. of the species are highlighted in brief. Mishra (2001); Choudhury (2001) did not report this species from Tripura.

Staurochilus ramosus (Lindl.) Seidenf. Opera Bot. 95:95.1988. *Saccolabium ramosum* Lindl. Gen. Sp. Orch. Pl. 224. 1833. *Cleisostoma ramosum* (Lindl.) J.D. Hook. Fl. Brit. India 6: 72. *Pomatocalpa ramosa* (Lindl.) Summerh. KewBull. 56.1948.

Small epiphytes, 20-25 cm high, stem 3-6 cm long, 5-10 mm thick, somewhat compressed, sheathed; roots

basal, much spreading, vermiform, compressed. Leaves distichous, jointed, slightly arched, oblong-lorate, truncate, erose, 16-23 cm long, 10-16 mm broad. Inflorescence paniculate, 1-2 per plant, erect; peduncle 10-75 mm long, 1-2 mm thick; panicles broad, 10-20 cm long, very much branched; braches weakly-zigzag, filiform, deep brown, many flowered. Bracts sheathing, broadly triangular, acute, c. 1×1.6 mm. flowers c. 8×7 mm, faintly scented. Sepals and petals spreading, deflexed, fleshy, yellow-ochre, centrally reddish brown within, pale yellow without. Sepals oblong-obovate, obtuse, apices incurved; laterals slightly oblique. Petals slightly obliquely obovate, blunt, apical margin weakly undulate. Lip white, with maroon markings, panduriform, 3-lobed, spurred; lateral lobes erect, obliquely triangular, acute; disc papillosus; apical lobe broadly ovate, rounded, weakly notched at apex or not, constricted at base, obscurely 3-lobulate; spur conic-cylindric, flattened front to back; front wall puberulent; backwall glabrous with an erect, squarish tongue.

Flowering: April-June

Fruiting: May-March

Habitat: In moist deciduous or occasionally in semi-evergreen forests under medium to dense shade between 160-800m.

Specimen examined: Sipahijala Wildlife Sanctuary, Tripura.

Type: India, U.P., Gangetic Delta. *Sine loc. N. Wallich* (Drawing No. 654 of Wallich)

Distribution: India (Chhattisgarh, Jharkhand, Sikkim, Meghalaya, West Bengal, Odisha), Bangladesh, Myanmar, Thailand.

Note: The genus *Staurochilus* was established in 1896 by H.N. Ridley in the Journal of the Linnean Society without having the generic descriptions. The genus closely resembles *Trichoglottis* and their relationship is

yet not resolved. Seidenfaden (1988) discussed this relationship and treated them as separate or distinct genera. However, the genus *Staurochilus* comprises of

14 species distributed in India, through SE Asia to the Philippines and Indonesia Pearce and Cribb (2002).



Fig. 1. *Staurochilus ramosus* (Lindl.) Seidenf (a) Juvenile plant; (b) Plant having flowering bud; (c) Flowers and (d) Seed bearing capsules.

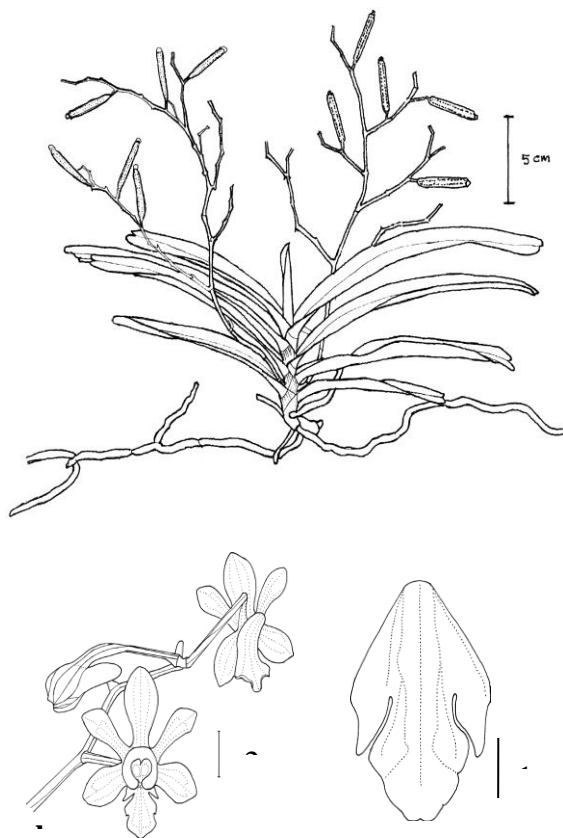


Fig. 2. Diagrammatic sketch of *Staurochilus ramosus* (Lindl.) Seidenf.: a. Whole plant with capsule; b. Flower ; c. Lip.

CONCLUSIONS

As this orchid is rare to Tripura state, conservation and evaluation should be taken up on priority.

FUTURE SCOPE

Extensive orchid survey will add many new species and rare endangered species for North East India, which will need immediate conservation.

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Conflict of Interest. None.

REFERENCES

- Baishanab, B., Banik, B., Majumdar, K. and Datta, B. K. (2017). Four new additions of orchid species for the flora of Tripura North East India. *Envis Bulletin Himalayan Ecology*, 25, 111-115.
- Baishanab, B. and Datta, B. K. (2019). The genus *Dendrobium* Sw. Orchidaceae in Tripura India. *Plant Science Today*, 6(2), 1-11.
- Choudhury, H. J. (2001). Orchid diversity in North East India. *Journ. Orchid Soc. India*, 15, 1-17.
- Deb, D. B. (1983). The Flora of Tripura State. Vol. II 'Today and Tomorrow' Printers and Publishers, New Delhi.
- Hooker, J. D. (1890). Orchidaceae In: Flora of British India L. Reeve and Co *Ashford kent.*, 5, 687-864 and 6, 1-198.
- Mishra, S. (2001). Orchids of India. Bisensingh Mahendra Pal Singh, Dehradun India.
- Pearce, N. R. and Cribb, P. J. (2002). The orchids of Bhutan, the Royal Botanic Garden Publ. Edinburgh, 20A Inverleith Row, Edinburgh EH3 and the Royal Government of Bhutan, pp. 561-562.
- Seidenfaden, G. (1988). Orchid genera in Thailand 14.Fifty-nine vandoid genera; *Opera Bot.*, 95, 1-398.

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